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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,525	11/13/2001	Jonathan S. Goldick	MS1711.1/40062.123US01	8013
27488 7590 01/24/2008 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER BOUTAH, ALINA A	
			ART UNIT 2143	PAPER NUMBER
			MAIL DATE 01/24/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/992,525

Applicant(s)

GOLDICK, JONATHAN S.

Examiner

Alina N Boutah

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 11-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This action is in response to Applicant's amendment filed October 31, 2007. Claims 10 and 17 have been cancelled. Claims 1-4, 6-9, 11-16 and 18-22 are pending in the present application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2007 has been entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6-9, 11-16 and 18-22 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 6 and 7, the claims recite "computer program product..." In view of the specification, page 4, line 23 to page 5, line 3, the "computer program product" is defined as a

"propagated signal," which is a form of energy. Energy is not one of the four categories of invention and therefore the claim is not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not combination of substances and therefore not a composition of matter.

Regarding claims 8, 9, 19 and 20, these claims are rejected for at least two reasons:

1. the claims recite "computer-readable medium." In view of the specification, page 8, line 6, "computer-readable medium" may comprise communication media, which typically embodies computer readable instructions, data structures, program modules or other data in the modulated data signal such as a carrier wave or other transport mechanism and includes any information delivery means (specification, page 8, lines 14-22). "Modulated signal," for example is a form of energy which is not one of the four categories of invention and therefore the claim is not statutory.

2. the claims are directed to non-functional descriptive material because they are mere arrangement of data. When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See MPEP 2106.01, Section 1.

Claims 11-16, 21 and 22, the recite a "system" as claimed lacks evidence of storage on a medium which enables any underlying functionality to occur. The elements listed in the claims

(a receive module, determination module, and update module) are not hardware elements. Instead, they are software elements. Software, per se, is non-statutory. See M.P.E.P. 2601.1 Section I, which states, "Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 9, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,510,478 issued to Jeffords et al. (hereinafter referred to as Jeffords) in view of USPN 6,704,767 issued to Simmons et al. (hereinafter referred to as Simmons)

Regarding claim 8, Jeffords teaches a computer-readable medium having stored thereon a locked resource, wherein the locked resource comprises:

a resource object data section for storing actual object data (abstract; col. 3, line 65 to col. 4, line 18);

a lock object, wherein the lock object comprises a plurality of properties, wherein a first property identifies a lock owner, and wherein the first property may be modified by to change the lock owner (abstract; figures 6-10; col. 2, lines 35-62).

However, Jeffords does not explicitly teach modifying at least one property associated with the lock object without unlocking the resource. In an analogous art, Simmons teaches modifying a lock property associated with lock object without unlocking the resource (figure 5; col. 3, line 57 to col. 4, line 4).

At the time the invention was made, one of ordinary skill in the art would have been motivated enable modification of lock ownership properties in order to guard against overlapping modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Regarding claim 9, Jeffords teaches a computer-readable medium as defined in claim 8 wherein a second property relates the resource object and wherein the second property may be modified by the lock owner to associate the lock object with a second resource object (col. 3, line 65 to col. 4, line 18).

Regarding claim 19, Jeffords does not explicitly teach a computer-readable medium as defined in claim 8, wherein a second property identifies a lock type. In an analogous art, Simmons teaches a second property that identifies a lock type (figure 5; col. 3, line 57 to col. 4, line 4). At the time the invention was made, one of ordinary skill in the art would have been

motivated to employ properties to identify a lock type in order to allow processes to distinguish among different types, thus preventing overlapping modifications.

Regarding claim 20, Jeffords fails to explicitly teach a computer-readable medium as defined in claim 8, wherein a second property identifies a lock scope. In an analogous art, Simmons teaches a property defining a lock scope (i.e. lock mode such as exclusive lock). At the time the invention was made, one of ordinary skill in the art would have been motivated to employ properties to identify a lock scope in order to allow processes to distinguish among different types, thus preventing overlapping modifications.

Claim 1-7, 11-16, 18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,510,478 issued to Jeffords et al. (hereinafter referred to as Jeffords) in view of USPN 6,704,767 issued to Simmons et al. (hereinafter referred to as Simmons), in further view of Applicant's admitted prior art.

Regarding claim 1, Jeffords teaches a method of modifying properties of a lock object associated with a resource in a distributed environment, wherein the lock object has a lock owner, the method comprising:

receiving a request to modify the lock ownership property, wherein the request originates from a requesting client computer system (abstract; figure 5, 502; figure 9 – requesting to change lock owner);

analyzing the request to determine whether the request is made by the lock owner (figure 5, 504; col. 2, lines 55-65); and

if the request is made by the lock owner, modifying the lock (abstract, figure 5; col. 2, lines 41-42; col. 3, line 65 to col. 4, line 18).

However, Jeffords does not explicitly teach modifying at least an ownership property associated with the lock object without unlocking the resource associated with the lock object. In an analogous art, Simmons teaches modifying a lock ownership property associated with lock object without unlocking the resource associated with the lock object (figure 5; col. 3, line 57 to col. 4, line 4).

At the time the invention was made, one of ordinary skill in the art would have been motivated enable modification of lock ownership properties in order to guard against overlapping modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Jeffords fails to explicitly teach wherein the request is created using a Web Distributed Authoring and Versioning protocol and is transmitted over the Internet. Applicant's admitted prior art teaches a requesting process communicating with received modules using Web Distributed Authoring and Versioning protocol (specification, page 2). At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the requesting process to communicate with the receive module using Web Distributed Authoring and Versioning Protocol (WebDAV) in order to allow client computer systems to access server-side resources for the purpose of editing those resources, WebDAV allows a client to lock a resource

when using that resource so that subsequent users may not access that resource during that time, thus preventing lost update problem (see specification, page 2, lines 5-19).

Regarding claim 2, Jeffords teaches the method as defined in claim 1 wherein the method further comprises:

following the determination of whether the request is made by the lock owner, determining whether the resource is locked by another client computer system that may conflict with the requested modification (abstract; figure 5); and

if the resource is locked by a conflicting lock, denying the received request (col. 2, line 45-47).

Regarding claim 3, Jeffords fails to explicitly teach a method as defined in claim 1 wherein the request further relates to modifying a lock type property of the lock object, and if the request is made by the lock owner, modifying the lock property associated with the lock object without unlocking the resource associated with the lock object. Simmons teaches modifying a lock type property of the lock object, and if the request is made by the lock owner, modifying the lock property associated with the lock object without unlocking the resource associated with the lock object (figure 5; col. 3, line 57 to col. 4, line 4). At the time the invention was made, one of ordinary skill in the art would have been motivated enable ~~modification~~ of lock properties in order to guard against overlapping modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Regarding claim 4, Jeffords does not teach a method as defined in claim 1 wherein the request relates to the modification of the lock scope property of the lock object. Simmons teaches modifying a lock property of the lock object (figure 5; col. 3, line 57 to col. 4, line 4).

At the time the invention was made, one of ordinary skill in the art would have been motivated enable modification of lock properties in order to guard against overlapping modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Regarding claim 5, Jeffords teaches a method as defined in claim 1 wherein the request relates to the modification of a lock ownership (abstract, figure 5; col. 2, lines 41-42).

Regarding claim 6, Jeffords teaches a computer program product readable by a computer and encoding instructions for executing the method recited in claim 1 (claim 34).

Regarding claim 7, Jeffords teaches a computer program product readable by a computer and encoding instructions for executing the method recited in claim 5 (claim 34).

Regarding claim 11, Jeffords teaches a system for modifying a lock object in a distributed environment, the distributed environment having a plurality of resources and wherein at least one resource is associated with the lock object, the system comprising:

a receive module for receiving a resource request from a requesting process, wherein the request includes modification information (abstract; figure 5, 502);

a determination module for determining whether the requesting process owns the lock object associated with the resource (figure 5, 504; col. 2, lines 55-65); and

an update module for modifying the lock object upon a determination that the requesting process owns the lock object (abstract, figure 5; col. 2, lines 41-42; col. 3, line 65 to col. 4, line 18), wherein modifying the at least one property occurs without unlocking the resource associated with the lock object.

However, Jeffords does not explicitly teach modifying at least one ownership property associated with the lock object without unlocking the resource associated with the lock object. In an analogous art, Simmons teaches modifying a lock ownership property associated with lock object without unlocking the resource associated with the lock object (figure 5; col. 3, line 57 to col. 4, line 4).

At the time the invention was made, one of ordinary skill in the art would have been motivated enable modification of lock properties in order to guard against overlapping modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Jeffords fails to explicitly teach wherein the request is created using a Web Distributed Authoring and Versioning protocol and is transmitted over the Internet. Applicant's admitted prior art teaches a requesting process communicating with received modules using Web Distributed Authoring and Versioning protocol (specification, page 2). At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the requesting process to communicate with the receive module using Web Distributed Authoring and Versioning Protocol (WebDAV) in order to allow client computer systems to access server-side

resources for the purpose of editing those resources, WebDAV allows a client to lock a resource when using that resource so that subsequent users may not access that resource during that time, thus preventing lost update problem (see specification, page 2, lines 5-19).

Regarding claim 12, Jeffords teaches a system as defined in claim 11 wherein the determination module also determines whether there is a conflicting lock associated with the requested resource and wherein the update module does not modify the lock object upon a determination that a conflicting lock exists (col. 2, line 45-47). However, Jeffords does not explicitly teach modifying at least one property associated with the lock. In an analogous art, Simmons teaches modifying a lock property (figure 5; col. 3, line 57 to col. 4, line 4).

At the time the invention was made, one of ordinary skill in the art would have been motivated enable modification of lock properties in order to guard against overlapping modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Regarding claim 13, Jeffords teaches a system as defined in claim 11 wherein the lock object has a lock type property, and wherein the update module modifies the lock type property (figure 3). However, Jeffords does not explicitly teach modifying at least one property associated with the lock. In an analogous art, Simmons teaches modifying a lock property (figure 5; col. 3, line 57 to col. 4, line 4).

At the time the invention was made, one of ordinary skill in the art would have been motivated enable modification of lock properties in order to guard against overlapping

modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Regarding claim 14, Jeffords teaches a system as defined in claim 12 wherein the lock object has a lock scope property, and wherein the update module modifies the lock scope property (col. 4, lines 41-65). However, Jeffords does not explicitly teach modifying at least one property associated with the lock. In an analogous art, Simmons teaches modifying a lock property (figure 5; col. 3, line 57 to col. 4, line 4).

At the time the invention was made, one of ordinary skill in the art would have been motivated enable modification of lock properties in order to guard against overlapping modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Regarding claim 15, Jeffords teaches a system as defined in claim 11 wherein the lock object has a lock ownership property, and wherein the update module modifies the lock ownership property to thereby transfer the lock object from one process to another (figure 9; col. 9, lines 17-41). However, Jeffords does not explicitly teach modifying at least one property associated with the lock. In an analogous art, Simmons teaches modifying a lock property (figure 5; col. 3, line 57 to col. 4, line 4).

At the time the invention was made, one of ordinary skill in the art would have been motivated enable modification of lock properties in order to guard against overlapping

modifications between concurrent users, thus decrease the likelihood that data will be in incomprehensible state (abstract).

Regarding claim 16, Jeffords teaches a system as defined in claim 11 further comprising a transfer module for transferring ownership of the lock object from the requesting process to another process (figure 9; col. 9, lines 17-41).

Regarding claim 18, Jeffords teaches a method as defined in claim 1 wherein the request further relates to the modification of a resource identifier property, and if the request is made by the lock owner, modifying the resource identifier property to associate the lock object with a second resource (figure 9; col. 9, lines 17-41).

Regarding claim 21, Jeffords teaches a system as defined in claim 11, wherein the lock object has a resource identifier property, and wherein the update module modifies the resource identifier property as set forth in the modification information (abstract, figure 5; col. 2, lines 41-42; col. 3, line 65 to col. 4, line 18).

Regarding claim 22, Jeffords teaches a system as defined in claim 21, wherein the update module modifies the resource identifier property to associate the lock with a second resource (abstract, figure 5; col. 2, lines 41-42; col. 3, line 65 to col. 4, line 18).

Response to Arguments

Applicant's arguments have been considered but are not found persuasive.

In response to Applicant's argument that Simmons does not teach "receiving a request to modify at least one owner property associated with the lock object" as claimed, the PTO respectfully disagrees and submits that this is suggested by Simmons. For example, as admitted by Applicant in the remarks page 7, Simmons discloses a system for managing locks that give permission to access resources. A lock manager converts an exclusive mode lock to a lesser lock in response to a lock downgrade request transmitted by a blocking process that is releasing the lock. As commonly known in the art, a lock object possess properties, such as ownership. When an exclusive mode lock is downgraded to a lesser lock, it implies that the ownership is also downgraded. By definition, "exclusive" implies that there is only one owner of the lock. Therefore, downgrading from exclusive to a lesser lock implies that the ownership of the lock changes from one owner to more than one. For at least this reason, the PTO sustains the rejections.

In response to applicant's argument that there is no suggestion to combine Applicant's admitted prior art with Jeffords and Simmons references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as admitted by Applicant, the WebDAV provides methods that allow a client to lock a resource when using that

resource so subsequent users may not access the resource at the same time. Thus the locking scheme of WebDAV helps prevent the "lost update" problem.

Conclusion

It is noted that the column, line, and/or page number citations used in the prior art references as applied by the Examiner to the claimed invention are for the convenience of the Applicant to represent the relevant teachings of the prior art. The prior art references may contain further teachings and/or suggestions that may further distinguish the citations applied to the claims, therefore, the Applicant should consider the entirety of these prior art references during the process of responding to this Office Action. It is further noted that any alternative and non-preferred embodiments as taught and/or suggested within the prior art references also constitute prior art and the prior art references may be relied upon for all the teachings would have reasonably suggested to one of ordinary skill in the art. See MPEP 2123.

The prior art listed in the PT0-892 form included with this Office Action disclose methods, systems, and apparatus similar to those claimed and recited in the specification. The Examiner has cited these references to evidence the level and/or knowledge of one of ordinary skill in the art at the time the invention was made, to provide support for universal facts and the technical reasoning for the rejections made in this Office Action including the Examiner's broadest reasonable interpretation of the claims as required by MPEP 2111 and to evidence the plain meaning of any terms not defined in the specification that are interpreted by the Examiner

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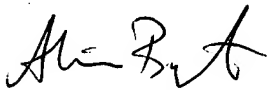
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in accordance with MPEP 2111.01. The Applicant should consider these cited references when preparing a response to this Office Action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N. Boutah whose telephone number is 571-272-3908. The examiner can normally be reached on Monday-Friday (9:00 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alina Boutah
Patent Examiner
AU 2143